

Notice of Allowability

Application No.

09/987,779

Examiner

Myles D. Robinson

Applicant(s)

IIDA ET AL.

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/11/2007.
2. ☒ The allowed claim(s) is/are 14 and 16 - 19.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Twyler Lamb
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 6/11/2007, and has been entered and made of record. Currently, **claims 14 and 16 – 19** are pending.

Response to Arguments

2. Applicant's arguments (see *Remarks 6/11/2007 [page 6]* and see *Remarks 3/6/2007 [page 6, line 1 – page 8, line 14]*) with respect to **claims 14, 18 and 19** have been fully considered and are persuasive. The rejections of claims have been withdrawn.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Raymond DiPerna on 9/18/2007.

The application has been amended as follows:

Claim 18: ~~A computer program product stored in~~ A computer readable storage
medium ~~comprising storing a computer program~~ executed by a computer to perform

~~code for~~ a method of performing color processing to output color data to an image processing unit, the method comprising the steps of:

- acquiring spectral data which indicates an input color;
- acquiring characteristic information of the image processing unit;
- determining a color data format of color data in accordance with the acquired characteristic information of the image processing unit to output the color data to the image processing unit;
- generating the color data having the determined color data format from the acquired spectral data; and
- outputting the generated color data to the image processing unit,

wherein the color data format includes a spectral data format and a color component format which indicates a color using a plurality of color component data, and

wherein said generating step includes calculating the plurality of color component data from the spectral data when the color component format is determined as the color data format in said determining step, and said outputting step includes outputting the acquired spectral data to the image processing unit when the spectral data format is determined as the color data format in said determining step.

REASONS FOR ALLOWANCE

4. ***Claims 14 and 16 – 19*** are allowed.

Referring to **claims 14, 18 and 19**, the innovative limitation that distinguishes the Applicant's claim is outputting the acquired spectral data to the image processing unit

when the spectral data format is determined as the color data format in the determining step.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamada (Japanese Patent No. 05-298437) discloses a color picture processor to execute color conversion to take the characteristics of an input/output device into consideration (*see Abstract*).

Matsuura et al. (U.S. Patent No. 6,853, 747, Japanese Patent No. 2000-050097 and European Patent No. 961487) disclose an image processing method employing the profiles for an input device and for an output target film to prepare a color reproduction table to facilitate the input of image data that is near that of the output target film (*see Abstract and see Fig. 20*).

Iida et al. (Japanese Patent No. 2002-158886 and European Patent No. 1211883) disclose a picture processor deciding the optimum form of an output signal based on characteristics of an input unit and an output unit to solve compatibility differences (*see Abstract and Figs. 1 – 7*).

Nino et al. (U.S. Patent No. 7,173,733) disclose a method for modeling color halftones which estimates the reflectance of a print color by characterizing colors (*see Abstract and Fig. 10*).

Boston et al. (U.S. Pre-Grant Publication No. 2005/0169518) disclose a method for virtually accurately predicting color matches of different materials wherein the resulting synthesized reflectance data is employed in formulating matching colorant (see *Abstract and Figs. 10 and 17*).

Hersch et al. (U.S. Pre-Grant Publication No. 2005/0083540) disclose a prediction model for color separation, calibration and control of printers (see *Abstract and Figs. 5 – 6*).

Odagiri et al. (U.S. Pre-Grant Publication No. 2003/0038954 and 2002/0067493) disclose a color coordinate transformation table generation method generating a large number of association tables needed for constituting profiles according to a technique of generating virtual color samples or deriving color signals from numbers sets of spectral reflectance data by using inferred spectral characteristics (see *Abstract and Fig. 1*).

Wang et al. (U.S. Patent No. 6,435,654) disclose a color calibration for digital halftoning algorithm that independently calibrates a digital color print to accurately predict the optical characteristic of color patches printed in the color printer (see *Abstract and Figs. 8 – 9*).

Iida et al. (U.S. Patent No. 7,251,359) disclose a image processing apparatus that uses sample spectral distribution data selected based on color data from an object to estimate spectral distribution of a wavelength region (see *Abstract and Fig. 12*).

Faris (U.S. Patent No. 6,333,757) discloses an apparatus for producing and displaying spectrally-multiplexed images of three-dimensional imagery for use in stereoscopic viewing (see *Abstract*).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571) 272-5944. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



MDR

9/18/07



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